

Societal Benefits Topic Team Status Report

The Societal Benefit Topic Team is one of five topic teams working to formulate the Blueprint for the California Hydrogen Network, as ordered via Executive Order S-7-04 by Governor Schwarzenegger. Team members include approximately 20 scientists, engineers, businessmen and policymakers from California State government, national laboratories, universities, public utilities and auto manufacturers. Working on a volunteer basis, the team is examining key issues regarding the anticipated societal benefits of the transition to a hydrogen-based highway system in California. Environmental, social and health benefits are being examined, as well as methods to rank and prioritize Highway implementation options (hydrogen production methods, gas delivery options, etc.) with regard to these benefits. The team is also examining public policy options that incentivize the California Hydrogen Highway in all of its aspects. Our work is inclusive, providing prioritization and recommendation while preserving dissenting points of view.

Currently, the Societal Benefits Team is focusing on two efforts. 1) An assessment of the impacts of hydrogen and conventional vehicle operation 2) The development of candidate policy strategies that could be used to enable the California Hydrogen Network

The principal impacts of hydrogen vehicle operation being investigated are greenhouse gas (GHG) and criteria pollutant emissions and energy independence based on reduced petroleum consumption and increased use of renewables. The analysis includes various methods (or pathways) of hydrogen production and gas distribution options as well as vehicle types. The purpose of the analysis is to understand the issues and to rank various pathways in order to minimize harmful emissions.

Policy strategies are being developed that promote the California Hydrogen Highway system, and incentivize the development of hydrogen production (feedstocks, hydrogen generation technology), hydrogen fueling infrastructure (station hardware), hydrogen-based vehicles (cars, buses, public and private fleets), and market development for the Hydrogen Network.

Stefan Unnasch of TIAX LLC, a co-chairman of the Societal Benefits Topic Team is leading the effort to analyze the impacts of hydrogen vehicle operation. Mark Nordheim of Chevron-Texaco is organizing the effort to assess policy strategies.

Preliminary results from the Societal Benefits Team will be presented in a public forum on August 13, 2004 at the South Coast Air Quality Management District in Diamond Bar California. After gathering public feedback, the recommendations of the Societal Benefit Team will be finalized, and provided to the Hydrogen Highway Implementation Advisory Panel for consideration.

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